UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, WA 98101

October 4, 2004

Reply to
Attn. Of: ETPA-087

Ref: 04-005-BLM

Henri Bisson, State Director
Department of Interior
Bureau of Land Management
222 West Seventh Avenue, #13
Anchorage, AK 99513-7599

Dear Mr. Bisson:

The U.S. Environmental Protection Agency (EPA), Region 10, has reviewed the Final Environmental Impact Statement (EIS) for the **Alpine Satellite Development Plan (ASDP)** (CEQ No. 040411). These comments are provided in accordance with our responsibilities and authorities under Section 309 of the Clean Air Act (CAA), Section 102(2)(C) of the National Environmental Policy Act (NEPA), the Clean Water Act, and as a Cooperating Agency. The Final EIS evaluates the environmental impacts associated with ConocoPhillips Alaska, Incorporated (CPAI's) ASDP for five satellite oil production pads and associated infrastructure in the Colville River Delta and the Northeast Planning Area of the National Petroleum Reserve-Alaska (NPR-A) (together "Plan Area"). The Final EIS identifies a Preferred Alternative (Alternative F) that could fulfill the stated purpose and need of the proposed action.

EPA is a cooperating agency on this EIS because of our NEPA compliance requirements to issue a decision regarding National Pollutant Discharge Elimination System (NPDES) permit authorization for wastewater discharges associated with the ASDP. EPA intends to adopt this EIS to fulfill our NEPA compliance responsibilities (40 CFR Part 6). As a cooperating agency we have participated cooperatively with the Bureau of Land Management (BLM), Corps of Engineers (Corps), U.S. Coast Guard, and the State of Alaska in the identification of issues and concerns to be addressed in this document.

In March 2004, EPA provided BLM with our written 309 review comments on the Draft EIS. The Draft EIS evaluated four action alternatives. EPA rated Alternative A *(Applicant's Proposed Action)* and Alternative C *(Alternative Access Routes)* an EO-2 (Environmental Objections – Insufficient Information). We assigned a rating of EC-2 (Environmental Concerns – Insufficient Information) to Alternative B *(Conformance with Stipulations)* and Alternative D *(Roadless Development).*

We have reviewed the Final EIS and we are pleased to note that BLM has addressed a number of environmental objections raised in our written comments on the Draft EIS, such as moving infrastructure outside the 3-mile setback for Fish Creek. However, we have identified environmental concerns with the Preferred Alternative (Alternative F) because the information, data, analyses, or discussion in the Final EIS is insufficient to ensure that all development components of the Preferred Alternative would meet the substantive environmental requirements of Clean Water Act Section 404. While NEPA does not require that the Preferred Alternative in the Final EIS be the least environmentally damaging practicable alternative, the 404 permitting process does make that requirement. Our remaining concerns focus on the following: 1) road alignment design between CD-1 to CD-4, 2) information and analysis to justify not using roadless design for access to CD-4 and CD-5 production pads, 3) the proposed Nigliq Channel Bridge, 4) violation of Special Condition 10 of the Corps Permit, 5) insufficient erosion protection, 6) quality of materials from Clover Potential Gravel Source, and 6) lack of specific mitigation measures, and insufficient information regarding air quality impacts. Please find enclosed detailed comments highlighting our issues and concerns with the Preferred Alternative.

Our March 2004 written comments on the Draft EIS identified areas requiring additional information, data, analyses, or discussion that should be included in the Final EIS. EPA recommended that additional analysis of the full range of actions, alternatives, and impacts including the State of Alaska's proposed Colville River road and bridge crossing be developed. Our review also emphasized the need for additional economic, technical, and environmental information necessary to support the exceptions and amendments to the stipulations in the 1998 NE NPR-A Integrated Activity Plan (IAP)/EIS Record of Decision (ROD), and alternative mitigation measures and environmental safeguards to replace those stipulations that would be excepted or amended. Furthermore, our comments identified insufficient information and analysis on the hydrological effects to the aquatic environment to support proposed bridge crossings of the Nigliq Channel and the Ublutuoch River, and road access alignments to ensure compliance with the substantive requirements of Section 404 of the Clean Water Act.

EPA appreciates the opportunity to review and provide comments on the Final EIS for the Alpine Satellite Development Plan. As a cooperating agency, EPA is committed to working closely and collaboratively with the BLM, Corps, U.S. Coast Guard, and the State of Alaska to resolve our outstanding concerns and issues regarding this project. If you have any questions regarding our comments, please do not hesitate to contact me at (206) 553-1272. Please have your staff contact Teena Reichgott, Manager of the NEPA Review Unit at (206) 553-1601 or Mark Jen of my staff in our Alaska Operations Office in Anchorage at (907) 271-3411.

Sincerely,

Michelle Pirzadeh, Director
Office of Ecosystems, Tribal and Public Affairs

Enclosure

EPA COMMENTS ON THE ALPINE SATELLITE DEVELOPMENT PLAN FINAL ENVIRONMENTAL IMPACT STATEMENT OCTOBER 4, 2004

PREFERRED ALTERNATIVE (ALTERNATIVE F)

The Preferred Alternative (Alternative F) is described in Section 2.4.6 of the Final EIS. The Preferred Alternative represents development components from each of the action alternatives evaluated in the Draft EIS. EPA commends the BLM for identifying a Preferred Alternative that removes certain road access segments, pipelines, and other infrastructure outside of the 3-mile set back for Fish Creek, which was established as Stipulation 39(d) in the 1998 Northeast NPR-A IAP/EIS ROD to protect important subsistence and cultural resources. As discussed below, certain development components of the Preferred Alternative may not comply with the Section 404(b)(1) Guidelines.

Road Alignment between CD-1 and CD-4

In the Final EIS, Section 2.4.6.1 (Page 103) indicates that all roads would be designed and constructed to provide adequate cross flow to prevent raising the water level on the upstream side of roads by more than 6-inches compared to that for the downstream side of the roads for more than one week after peak discharge. In addition, the road from CD-1 to CD-4 would be designed to meet these cross-flow criteria and the State's fish passage criteria (AS 41.14.840). Different options to meet this requirement have been described in the Final EIS to include a culvert crossing a narrow section of Lake 9323 as proposed in Alternative A; a bridge crossing the same narrow section of Lake 9323 as proposed in Alternatives B and C; or realignment of the road to the east of Lake 9323 furnished with either culverts or bridges at two water passages along its route. The road alignment that is analyzed in the Final EIS includes the road alignment route to the east of Lake 9323 with bridges of approximately 40-feet in length (25-ft channel opening) over the two waterways. Although the options identified in the Final EIS could meet the cross flow criteria for road design between CD-1 and CD-4, in the absence of site specific hydrology information and analysis, EPA supports a Preferred Alternative which incorporates bridges in the road alignment design and avoids any discharge of fill material directly into Lake 9323 as the least environmentally damaging practicable alternative under Section 404 of the Clean Water Act.

CLEAN WATER ACT §404

Concurrent with the notice of availability for the Final EIS, the Corps issued a revised Public Notice for the Alpine Satellite Development Plan. The project described in the revised Public Notice is reduced in scope from the Preferred Alternative identified in the Final EIS. At this time, the applicant has requested that the Corps prioritize permitting for the ASDP to include only CD-3 and CD-4 production pads and associated infrastructure. The following comments provided to the BLM focuses on our concerns with the Preferred Alternative in the Final EIS.

EPA will be submitting additional comments to the Corps regarding our issues with that portion of the ASDP identified in the revised Public Notice.

Least Environmentally Damaging Practicable Alternative vs. Preferred Alternative

The Section 404(b)(1) Guidelines of the Clean Water Act require selection of the least environmentally damaging practicable alternative. No discharge of dredged and/or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem. An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes [40 CFR 230.10(a)(2)].

While NEPA does not require that the Preferred Alternative in the Final EIS be the least environmentally damaging practicable alternative, the 404 permitting process does make that requirement. Based on our review of the Final EIS, the information is insufficient to fully assess impacts that should be avoided in order to identify the least environmentally damaging practicable alternative to protect the environmental and subsistence resources of the Plan Area. Absence of site specific information and analysis regarding the hydrology, sedimentation, and aquatic habitat would lead us to support a roadless design and roadless access to satellite production pads for CD-4 and CD-5 as the least environmentally damaging practicable alternative. A roadless design would significantly avoid and minimize adverse impacts to environmental and subsistence resources by reducing the need for an additional gravel material site (e.g., Clover Potential Gravel Source) and avoid surface impacts to wetlands. EPA believes the roadless development proposed under Alternative D may be more environmentally preferable.

Furthermore, the proposed Nigliq Channel Bridge crossing directly west of CD-2 for accessing NPR-A satellite production pads (CD-5, CD-6, and CD-7) may not represent the least environmentally damaging practicable alternative. A bridge over the Nigliq Channel may result in adverse impacts to subsistence fishery resources and may restrict access to critical subsistence areas in Harrison Bay. As discussed in our March 2004 comments on the Draft EIS, other reasonable alternatives to the proposed Nigliq Channel bridge access should include the State of Alaska's proposed Colville River Road and Bridge Project. It is our understanding that an EIS will be prepared for this project. EPA believes that the Colville River Road and Bridge project may represent the least environmentally damaging practicable alternative that could fulfill the purpose and need of this proposed action. The EIS for the Colville River Road and Bridge project would provide the additional information and analysis that is necessary to compare the potential adverse impacts associated with each proposed bridge crossing to NPR-A lands. This information must be provided for agency and public review before any decisions can be made. EPA recommends that a federal decision regarding surface access to NPR-A production satellites using a bridge crossing over the Nigliq Channel be deferred until completion of the EIS for the Colville River Road and Bridge project.

Special Condition 10 of the Corps Permit

In 1998, the Corps issued the CWA Section 404 permit (2-960874, Colville River 18) for the placement of gravel fill material into waters of the United States, including wetlands, to construct the Alpine Development Project for CD-1 and CD-2 (Appendix L). Special Condition 10 requires the applicant to incorporate roadless satellite production facilities in the Colville River Delta unless an environmentally preferable alternative design is available or roadless development is infeasible. Based on our review of the Final EIS, the Preferred Alternative does not comply with Special Condition 10. In particular, the gravel access road between CD-1 and CD-4, and the gravel road/bridge access between CD-2 and CD-5 would be in direct violation of this special condition. The Final EIS does not provide sufficient information to determine whether an environmentally preferable alternative design is available or roadless development is infeasible to meet the exception requirements of Special Condition 10. The Final EIS does not provide sufficient information to demonstrate to the agencies and the public that the exception has been met.

Erosion Protection

The Final EIS (Section 2.4.3; Page 79) describes methods for roadway embankment armoring. Methods that have been identified in the Final EIS include rip rap rock armoring, articulated concrete mats, geotextile bags filled with sand/gravel, etc. The Final EIS does not include sufficient information to ensure that gravel roads and pads will be provided adequate protection from erosion and slope failure. In particular, CD-3 would experience a high potential of erosion from both river flooding and storm surges due to its location in the lower Colville River Delta. Additional information and hydraulic modeling is necessary to ensure that the types, design, and methods of side slope protection are adequate to protect against erosion, and would minimize against continual monitoring and maintenance. As a cooperating agency, EPA would be available to work with agencies in the design of erosion protection measures.

Clover Potential Mine Site

The Final EIS (Section 2.3.5; Page 46) indicates that the Clover Potential Gravel Source would provide gravel for road and pad construction associated with CD-5, CD-6, and CD-7. The Final EIS does not provide sufficient information to indicate the quality and quantity of the gravel resources from this site. Past experience with the Alpine Development Facility (CD-1 and CD-2) indicates that material from the existing permitted ASRC gravel source contains relatively high concentrations of fines and sands which require approximately two seasons to drain before becoming suitable for supporting facilities. EPA recommends that gravel resources from the Clover Potential Gravel Source be tested and characterized (e.g., particle size, percent silt, sand, clay, etc.) to demonstrate its suitability as fill material for purposes of 404(b)(1) compliance. A federal decision to authorize the Clover Potential Mine Site should be deferred until after additional analysis is conducted on the gravel resource and this information provided for agency and public review.

Mitigation Measures

The Section 404(b) (1) Guidelines specify that no discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem [40 CFR Part 230.10(d)]. The Final EIS does not provide sufficient information to demonstrate that steps have been taken to minimize impacts associated with the Preferred Alternative. The Final EIS identifies mitigation measures for the Preferred Alternative (Appendix G) that could mitigate for certain impacts to resources evaluated in the document. However, these mitigation measures are not site specific or project specific enough to ensure compliance with the Clean Water Act. EPA recommends that the federal decision regarding the Preferred Alternative for the ASDP incorporate project specific mitigation measures and/or special conditions. As a cooperating agency, we would be willing to work on developing these special conditions.

CLEAN AIR ACT

The Final EIS does not provide sufficient information regarding air quality impacts for CD-5, CD-6, and CD-7 to provide agencies and the public with a clear understanding of the environmental consequences of the proposed action. Based on our review, it is unclear what are the maximum estimated emissions of criteria pollutants (e.g., O_3, CO, NO_2, SO_2, PM_{10}) and non-criteria pollutants (e.g., Hazardous Air Pollutants – HAPs) that would be generated from this project. Estimates from all emission sources for each pad are not available. Additional information, data, and estimates regarding air quality emissions (e.g., NAAQS) for CD-5, CD-6, and CD-7 should be developed. In addition, estimates for fugitive PM emissions during aircraft landing and/or takeoff have not been included in the Final EIS. Furthermore, the emissions from the diesel-fired emergency generators have not been included in the Final EIS. Emissions analysis has been separated in phases - development, drilling, and operation. In those instances where certain phases may overlap, the air quality impact analysis should consider cumulative effects of overlapping phases. Mitigation measures as part of the emissions evaluation per New Source Performance Standards (NSPS) and National Emissions Standards for Hazardous Air Pollutants (NESHAP) criteria have not been adopted in the Final EIS. Due to the lack of sufficient information regarding air quality information for CD-5, CD-6, and CD-7, EPA recommends that a federal decision regarding these satellite pads be deferred.